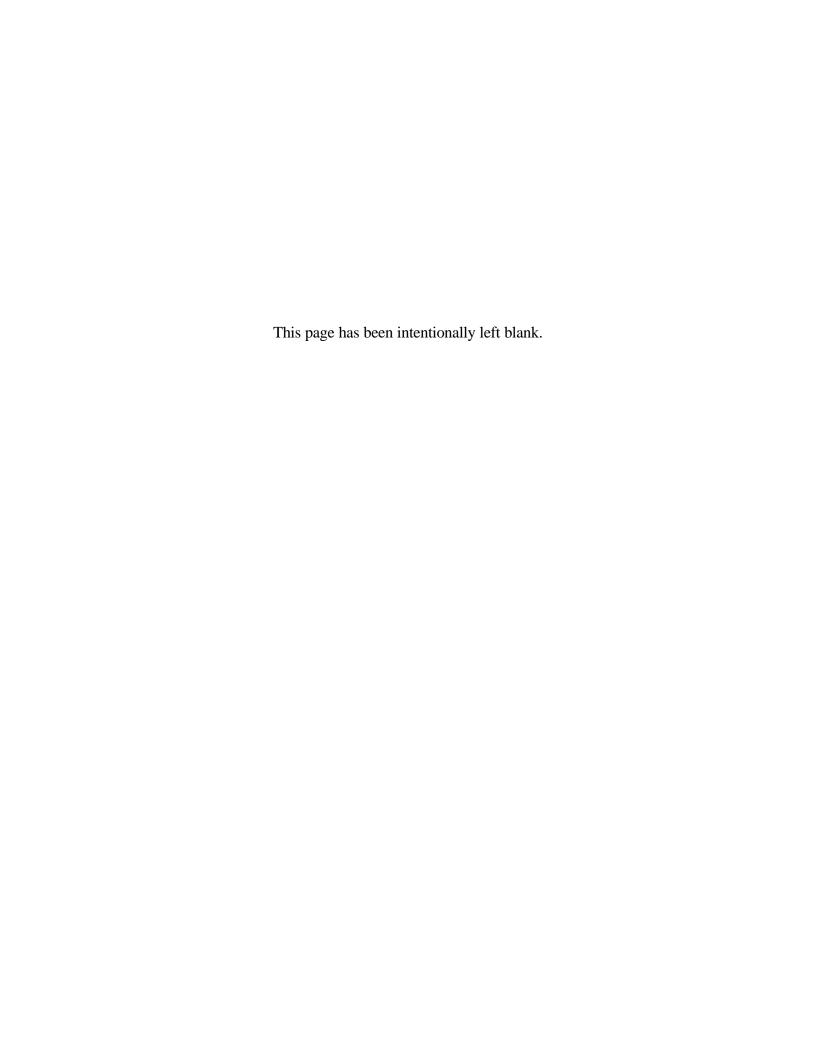
# APPENDIX A DATA SUBMITTAL FORM



#### **Appendix A -- Data Submittal Form and Instructions**

# INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

- 1. <u>Company Name/Site Location</u>: Insert name, State, and County of the proposed facility. The address should be the location of the proposed facility not the address of the parent company unless they are the same.
- 2. <u>Plant/Facility Contact Information:</u> The is a person knowledgeable about the process at the plant or facility being permitted. Enter the name, telephone numbers (voice and fax), e-mail address, and mailing address of the plant contact. (A check box has been provided if the plant's and the plant contact's physical address are the same.)
- 3. **Permitting Agency Contact Information:** Indicate the person at the permitting agency to whom requests should be directed. This should be the person most capable of responding to factual questions concerning the source and processes subject to this permitting action. Please provide area code with the phone number, E-mail address, and conventional mail address.
- 4. Physical Plant Location Information:

  List the Universal Transverse Mercator (UTM) coordinates and UTM Zone of the facility being permitted. (This information is usually listed on United States Geological Survey (USGS) maps of the area where the facility is physically located.) The UTM coordinates are reported as Easting (X) and Northing (y). Easting indicate the horizontal or x coordinate within the UTM Zone for the source and Northing indicate the vertical or y coordinate within the UTM Zone for the source. The RBLC needs this information to determine proximity of the source to Class I areas (e.g., National Parks, Wilderness Areas, etc.). Please list the names of the Class One Areas within 100km of the source and Class One areas located within 100 to 250km of the source and their distance to the source.
- 5. <u>Permit/File Number</u>: This should be the identification number assigned by the agency that issued the permit.

[In general, each permit with a different permit number should be entered separately. Most of the time one permit number will cover a number of processes/pollutants in a plant. Some agencies issue one permit number per process and this can lead to one plant (physical location) having many individual permit numbers. We ask that you enter each of these individual permits into it's own RBLC determination. Unfortunately, there is no way to quickly duplicate the facility information, so each will have to be typed in separately. You could list the separate permit numbers in the Facility Notes area of the determination, but this would mean that individuals that search the data base will not be able to find that

determination based on a Permit Number search. Since this type of search is done fairly often, we prefer that you list each individual permit number in it's own RBLC determination. Sorry.]

6. <u>ID Numbers and Codes</u>: Fill-in the requested AIRS identification number, if available, and the SIC/NAICS code.

[We <u>really</u> must have the plant's SIC code! We are currently changing over to the North American Industrial Classification System (NAICS) so we have provided a place for it in the on-line data entry system.]

- 7. **Scheduling Information:** Permitting scheduling dates stored include:
  - receipt of application (estimated or actual)
  - final permit issued (estimated or actual)
  - start-up operation (estimated or actual)
  - compliance verification (estimated or actual)

Please enter all of the scheduling information available.

[Again, we really must have the "final permit issued" and "start-up operation" dates. In addition, we need the "compliance verification" date if you have it. If you don't list it, you will get a call back a year after the start-up date as a follow-up.]

8. Plantwide Emissions/Emissions Increase Information: Provide the name of each pollutant emitted in significant amounts and indicate the maximum amount of emissions (tons/year) that is anticipated for each pollutant (facility-wide, all processes) under this permit.

[If you have a Plantwide Emission for a pollutant that is not in the drop down list, please list it in the Facility Notes area of the determination. We are planning to add some (but not all) pollutant names to the Plantwide Emission pollutant drop-down list, but at this time only PM, SOX, NOx, CO, and VOC are on the list.]

**9.** Plantwide Information: Please describe the facility being permitted. Descriptions should be summary and brief. Examples are as follows:

Plant Level - In brief terms, indicate what kind of plant this is; for example: Integrated Steel Plant, Primary Aluminum Production, Publication Printing, Coil Coating, Power Plant, Oil Refinery; Coffee Roasting; Wastewater Treatment Plant; etc. A detailed narrative about the plant is not needed.

Source Level - List major processes that are part of the permitted source; for example: boiler, turbine, coke oven, rotogravure printing press, solid waste incinerator, coating line, lead smelter, air oxidation process, volatile organic liquid storage, etc. A detailed narrative about the process is not needed.

Fuel Type - List all fuels that will be used at this facility; for example: coal, # 2 distillate oil, process gas, etc. Again, a detailed narrative about the fuels used is not necessary.

Pollution Abatement Strategy - List all major pollution prevention and control systems/devices that will be used to reduce or eliminate air pollution; for example: powder coatings, low sulfur fuel, electrostatic precipitator, carbon adsorption, etc.

- **10. Facility Notes:** This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:
  - A More than one permit number [See note under Permit Number.]
  - A More detail on a particular process
  - A More than one contact person
  - A Further explanation regarding the designation of a source as new or modified
  - A Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)
- 11. **Process Description:** List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as necessary. Additional information on a process may be placed in the Process Notes section.

Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

Boiler, coal-fired, 3 each Kiln, 3 each Conveyors, coal/limestone Furnace, arc Boiler, recovery Boiler, power Engines, gas-fired

12. **Process Type Code**: A code assigned to each process (see Appendix B) used to categorize determinations.

[We really need this so please use the drop-down list. Do not use the codes that end in "000". The "000" code are category codes. Also, try and avoid using the codes that end in "999" as they are catch-all categories. If you do not enter an RBLC Process code, we will <u>try</u> to figure it out. If we can't, you <u>will</u> get a phone call.]

13. **SCC Code:** This code is the standard source classification for processes used throughout the Office of Air at EPA.

[We really need this so please use the drop-down list. If this is not listed, we will try to figure it out. If we can't, you will get a phone call.]

- 14. **Throughput Capacity**: Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit Appendix D.
- 15. <u>Compliance Verification</u>: This series of fields allows you to enter a yes or no response to the following questions:
  - Compliance verified?
  - Method of confirmation:

Stack testing? Other testing? Inspection? Calculations?

You may also enter a narrative description of other types of confirmation methods.

[If you leave this field blank, it defaults to "no" to indicate that compliance was not verified.]

16. **Process Notes**: This field should contain any additional information on the process being permitted.

17. **Pollutant(s) Emitted**: Make an entry for each pollutant or parameter for which a control requirement or other restraint has been specified (PM, SO<sub>2</sub> CO<sub>2</sub>, NO<sub>2</sub>, opacity, or others). Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM Particulate Matter SO<sub>2</sub> Sulfur Dioxide NO<sub>2</sub> Nitrogen Oxides CO Carbon Monoxide

VOC Volatile Organic Compounds

VE Visible Emissions

TRS Total Reduced Sulfur

F Fluoride Be Beryllium

H<sub>2</sub>S Hydrogen Sulfide

Hg Mercury VC Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

[Use the drop-down list. To quickly get to say "PM," just type a "P." This will move you down the list to the start of the P's. We are working on cleaning up this list, but at this time many pollutants are listed more than once. The one to choose is the one that lists the pollutant name and it's CAS number. For those pollutants that cover a range of pollutants (PM, PM10, NOx, SOx, VOC, opacity etc) the RBLC uses a custom CAS number. For example, these are the right drop-down entries in the Pollutant Name list to choose for the examples listed above: PM - "PM,PM"; PM10 - "PM10, PM"; NOx - "NOx, 10102"; SOx - "SOx, 7446"; VOC - "VOC, VOC"; opacity - "VE,VE".

Do <u>not</u> choose a pollutant that is not in the "name, CAS#" format because it will have to be changed. If you cannot find the pollutant you need to list in the dropdown, please send me an e-mail at <steigerwald.joe@epa.gov> and I will add it (along with it's CAS number) to the list.]

18. **Emission Limit(s):** For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

- Emission limit 1 and units: The primary emission limit listed in the permit.
- Emission limit 2 and units: If provided on the permit, these numbers represent any alternate or secondary emission measurements which the facility may make.
- Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base.

- 19. **Emission Type:** A one-character field indicating whether the emission is fugitive, point-source, or area-source.
- 20. <u>Pollution Reduction Ranking Information</u>: Two pieces of information are requested: The number of options examined and the rank of the option selected. The "rank" is the number of the option selected when the options are ordered according to the performance of the system. Number 1 would be the best controlled system, number 2 would be the next best, etc.
- 21. Regulatory Requirements Associated with Limit (Basis of Limit): Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by state/local rules, not PSD)
- LAER (lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other
- 22. **Pollution Reduction Method Description:** Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted

emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughout or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

[Please note that if you specify "NONE" for this field and then enter something in the Description field, you will get a phone call asking you if you really meant to put "NONE."

- 23. Overall Efficiency %: Enter the overall system pollution reduction efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency. Any breakdown of efficiencies for capture or collection individually should be shown under "Notes." For P2, indicate the overall effectiveness of the P2 methods.
- 24. **Cost Data:** Pollution reduction costs include:
  - Year of the dollar used in cost calculations
  - Cost verified by the permitting agency (yes or no)
  - Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
  - Capital cost of control equipment
  - Annual operation and maintenance cost for all control methods
  - Annualized cost (amortized capital cost + annual operation & maintenance costs)
- 25. **Pollutant Notes:** Use this to describe and other type of information you feel is important to your emission limit.

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE RBLC (MD-E143-03) US EPA RTP, NC 27711

# FORMAT FOR RACT/BACT/LAER CLEARINGHOUSE SUBMITTALS:

# **Expanded Instructions** (Revised March 2002)

Information can be submitted to the RBLC in the following formats:

- A Direct on-line submittal using RBLC Web.
- A Using the new RBLC Standalone Editor
- A Paper input using the new Clearinghouse submittal forms (dated 3/12/2002).

The on-line submittal procedure is the preferred format. Designated users may obtain a password that allows them to access the RBLC data base Edit module on the Web. Users can add new determinations and make changes to current entries in the Clearinghouse. User's can also download and install the new RBLC Standalone Editor. With the Standalone Editor State and local agency personnel can enter new RBLC determinations on their PC without an Internet connection. Once the user is satisfied with the determination it may be sent to the Clearinghouse electronically via e-mail or on a 3 ½ floppy disk. The final data submittal option is filling out the new RBLC paper form (available for downloading in PDF format on the RBLC Web site). All inquiries concerning RBLC submittals should be directed to:

RACT/BACT/LAER Clearinghouse (MD-E143-03)
Information Transfer & Program Integration Division
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27701

OR

The Clean Air Technology Center Information Line (919) 541-0800, FAX (919) 541-0242

The RBLC Input Form is available for downloading from the Product Information section of the CATC home page. Designed to facilitate the input of determinations and corrections, the form can be used to prepare new determinations and/or to update existing information. For those who wish, the hardcopy (paper) submittal form can be mailed to the RBLC at the above address.

**Note from RBLC System Administrator -** I have gone through this document and made notes after some of the field descriptions to help State and local agencies with their data entry. Here are some general guidelines:

(**New - March 2002:** We've added a new field at the pollutant level. It's the Pollutant Notes field. Use it to describe and other type of information you feel is important to your emission limit. Since we didn't have a place for this before, folks used to put it in the Facility Notes or the Control Description fields; now we have a place for it.)

- Use the RBLC emission unit abbreviations. It may sound trivial, but we can't promote any determinations until this is done. (Here are some examples "h" for hour, "gr" fir grain, "t" for ton, etc. A complete list is in an appendix of the User's Manual.)
- Enter process names in the correct format. For example: "boiler, coal-fired, 3" is correct; "3 coal-fired boilers" is wrong.
- Choose the correct pollutant name. This requires a little explanation: The "correct" pollutant name from the RBLC drop down list (on-line entry) will have 2 entries separated by a comma. The second entry is the pollutant's CAS number. For example, the correct entry for particulate matter (PM) is "PM, PM" and the correct entry for sulphur dioxide is "SO2, 7446-09-5". In the case of particulate matter, the RBLC abbreviation is PM and, since there is no CAS number for PM, the RBLC uses PM as it's CAS number. In general, if you are doing on-line data entry and the pollutant you are selecting from the drop down list only has one entry (not 2 entries separated by a comma), choose again!)
- Be sure to enter a SIC and SCC number for your facility and process, respectively.

Finally, here are the RBLC data fields we really have to have before we promote your determination:

Facility Level

- Facility/Plant Name
- State
- Permit Number
- SIC Code
- Permitting Agency Contact Name, telephone number, and e-mail address
- Dates the permit was issued and the operation was started

Process Level - Pro

- Process Name

- RBLC Process Code - Processes' SIC code

Pollutant Level

- Pollutant Name

- Emission Limit

- Basis of the limit
- Emission Type Pollution Reduction Method code and description

If this information is not included with your submittal, you will get a call from us. Thanks!

Mail to: RACT/BACT/LAERCLEARINGHOUSE

RBLC (MD-E143-03) USEPA

# RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

Plant/Facility Contact Information:	Mailing	Address:		
Plant Contact Name: Fax: E-Mail Address:		Audiess.		
Public Hearing Held? Y N (circle one)	UTM Coordinates: X:	Y:		. Zone:
Che Source is: New Modified (circle one)  Permit Number:  AIRS Facility Number:  EPAID Number:	Start Up Operation:	Date / / / / / / / / / / / / / / / / / / /	(circle one)  Estimated/Actual  Estimated/Actual  Estimated/Actual  Estimated/Actual	Company/Plant Location State County
Permitting Agency Contact Information: Permitting Agency:				
Agency Contact: Faz Telephone Number: Faz E-Mail Address:	x:			Zip Code:
Class One Area Name	Class One Areas Affected within 2		e Area Name	Distance (km)

Source Name:	Permit Number:	
	<del>-</del>	

		PLANTWIDE	<b>INFORMATION</b>		
acility Notes:					
lant Information -	Please include the following	ng information on the f	acility being permitted:		
			Mill, Paint Manufacturing, et	c ):	
Tier i iant Description	on/ivariative (for example -	Chemical Flant, Steel N	om, i ami Manaractaring, ci	·	
rief Emission Sour	ce(s) Description (for exam	ple - boiler, paint spray	booth, furnace, etc.):		
ype(s) of Fuel Used	l at this Facility:				
	<u> </u>				
Assorintian of the Do	Mution Abstament Stratage	y (for oxomplo fobrio fi	lter, ESP, carbon adsorbers,	novydor agatings ataly	
	munon Abatement Strategy	(101 example - labrie ii	iter, EST, carbon ausorbers,	powder coatings, etc.).	
escription of the re					
essemption of the fit					
	ong/Emissions In onessa In	formation (Data After C	Controll a		
Plantwide Emissi	ions/Emissions Increase In			Pollutant:	Emissions (T/YR)
	ons/Emissions Increase In Emissions (T/YR):	formation (Rate After C	Control): Emissions (T/YR):	Pollutant:	Emissions (T/YR)
Plantwide Emissi				Pollutant:	Emissions (T/YR)
Plantwide Emissi				Pollutant:	Emissions (T/YR

# RACT/BACT/LAER Clearinghouse Input Form, page 3 (Process/Pollutant Information)

Source Name:		Permit	t Number:
	Proces	ss Information	
Process Name/Description:			
RBLC Process Code:	SCC Code:		
Throughput Capacity/Size:		Primary Fuel:	
Compliance Verified? Y	N If so, By What Method? (circle to	hose that apply): Stack Test? Y N Other Test? Y N	Calculation? Y N Inspection? Y N
	Other Method?		
Process Notes :			
Pollutant Name:  CAS Number:  Pollution Prevention/Add-on C	Pollution Red  Pollution Prevention		Basis of Limit (circle one):  BACT-PSD BACT-Other LAER  MACT GACT RACT  NSPS NESHAPS OTHER
	uction Options Examined:	Overall % Efficiency of Control/ Prever Emission Type? (circle one): area	-
Emission Limits: Limit 1:		Pollutant Notes:	
Emission Limit2:			
RBLC Standard Emission Limit: (where applicable)			
Pollution Control Cost Info:	Yes No	Annualized Costs:	•
	Costs are indollars. Cost Effectivene (\$/T of poll. removed)		1 Cost Effectiveness

RBLC Input Form, page 4 (Pollutant Information - continuous and a continuo	nuation page) Source Name:			
Process Description:	Per	mit Number:	RBLC Process Co	de:
Information on Additional Pollutant	Pollutant In	nformation	Basis of Limit (c	ircle one):
Pollutant Name:	Pollution Reduction	n Method Description:	BACT-PSD BA	CT-Other LAER
CAS Number:	☐ Pollution Prevention (P☐ Add-on Control Device	· /		CT RACT
				SHAPS OTHER
Pollution Prevention/Add-on Control Equipment Descript	ion:			
No. of Pollution Reduction Options Examined:		Overall % Efficiency of Control/ Pre	vention System:	
Rank of Pollution Reduction Option Selected:		Emission Type? (circle one): ar	ea point fugiti	ve
EmissionLimits: Limit1:		Pollutant Notes:		
Emission Limit?				
RBLC Standard Emission Limit:				
(where applicable)				
Pollution Control Cost Info: O & M Costs:	Annualized Costs:	Capital Costs:	Costs a	
Costs verified by Agency? Yes No	Cost Effectiveness		ntal Cost Effectiveness	(year)
Information on Additional Pollutant		(\$/T of poll.	·	:1)·
information on Additional Politicality	Pollutant In	n Method Description:	Basis of Limit (c BACT-PSD BA	ACT-Other LAER
Pollutant Name:	□ Pollution Prevention (P			ACT RACT
CAS Number:	Add-on Control Device	· /		SHAPS OTHER
Pollution Prevention/Add-on Control Equipment Descript	ion:			
No. of Pollution Reduction Options Examined:		Overall % Efficiency of Control/ Pre	vention System:	
Rank of Pollution Reduction Option Selected:		Emission Type? (circle one): ar	ea point fugiti	ve
EmissionLimits: Limit1:		Pollutant Notes:		
Emission Limit 2:				
RBLC Standard Emission Limit: (where applicable)				
Pollution Control Cost Info: O & M Costs:	Annualized Costs:	Capital Costs:	Costs a	
Costs verified by Agency?	Cost Effectiveness	Incremen	ntal Cost Effectiveness	(year)
Yes No	(\$/T of poll, removed): -	(\$/T of poll.	removed):	

# APPENDIX B AGENCY CODE LISTING



#### Appendix B -- Agency Code Listing

#### **ALABAMA**

AL001	Alabama Dept of Environmental Mgmt
AL002	Huntsville Air Poll Control Agency, AL
AL003	Jefferson Co Department of Health, AL
A T 000	Other Alekeme

AL999 Other Alabama

#### <u>ALASKA</u>

AK001	Alaska Dept of Environmental Cons
AK002	Fairbanks North Star Borough, AK
AK003	S. Central Air, Anchorage APCA, AK
A TTO 000	

AK999 Other Alaska

## **AMERICAN SAMOA**

American Samoa Env Quality Commission AS001

AS999 Other American Samoa

#### **ARIZONA**

AZ001	Arizona Dept of Env Qual, Ofc of Air Qua
AZ002	Maricopa Co Air Pollution Control, AZ
AZ003	Pima Co Dept of Env Quality, AZ
AZ004	Pinal Co Air Quality Control Dist, AZ
۸ <b>7</b> 000	Other Arizona

AZ999 Other Arizona

## <u>ARKANSAS</u>

Arkansas Dept of Poll Ctrl & Ecology AR001

AR999 Other Arkansas

## **CALIFORNIA**

CA001	California Air Resources Board
CA002	Amador County APCD, CA
CA003	Bay Area AQMD, CA
CA004	Butte County APCD, CA
CA005	Calaveras County APCD, CA

CA006	Colusa County APCD, CA
CA007	El Dorado County APCD, CA
CA046	Feather River AQMD, CA
$CA008^{1}$	Fresno APCD, CA
CA009	Glenn County APCD, CA
CA010	Great Basin Unified APCD, CA
CA011	Imperial County APCD, CA
CA012	Kern County APCD, CA
CA013 <sup>4</sup>	Kings County APCD, CA
CA014	Lake County AQMD, CA
CA015	Lassen County APCD, CA
CA016 <sup>4</sup>	Madera County APCD, CA
CA017	Mariposa County APCD, CA
CA018	Mendocino County AQMD, CA
$CA019^{4}$	Merced County APCD, CA
CA020	Modoc County APCD, CA
CA029	Mojave Desert AQMD, CA
CA021	Monterey Bay Unified APCD, CA
$CA022^{4}$	Mountain Counties Air Basin, CA
CA023	North Coast Unified AQMD, CA
CA024	Northern Sierra AQMD, CA
CA025	Northern Sonoma County APCD, CA
CA026	Placer County APCD, CA
$CA027^{4}$	Plumas County Env. Health Department, CA
CA028	Sacramento Metropolitan AQMD, CA
CA030	San Diego County APCD, CA
CA047	San Joaquin Valley Unified APCD - Central Regional Office, CA
CA048	San Joaquin Valley Unified APCD - Northern Regional Office, CA
CA049	San Joaquin Valley Unified APCD - Southern Regional Office, CA
CA032	San Luis Obispo County APCD, CA
CA033	Santa Barbara County APCD, CA
CA034	Shasta County AQMD, CA
CA035	Siskiyou County APCD, CA
CA036	South Coast AQMD, CA
$CA037^{4}$	Standards County APCD, CA
$CA038^4$	Stanislaus County APCD, CA
CA039 <sup>4</sup>	Sutter County APCD, CA
CA040	Tehama County APCD, CA
CA041 <sup>4</sup>	Tulare County APCD, CA
CA042	Tuolumne County APCD, CA
CA043	Ventura County APCD, CA
CA044	Yolo-Solano APCD, CA
CA045 <sup>4</sup>	Yuba County APCD, CA
	<b>,</b>

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<sup>&</sup>lt;sup>1</sup> No longer active. Listed for historical purposes only.

# CA999 Other California

# **COLORADO**

CO001	Colorado Dept of Health - Air Poll Ctrl
CO002	Boulder County Health Department, CO
CO003	Denver City-Co Air Qual/Env Prot, CO
CO004	El Paso County Health Department, CO
CO005	Jefferson Co Dept of Health & Env, CO
CO006	Larimer Co Health Dept, Env Health, CO
CO007	Mesa County Health Department, CO
CO008	Pueblo City-County Health Department, CO
CO009	Weld County Health Department, CO
CO999	Other Colorado

#### **CONNECTICUT**

CT001	Connecticut Bureau of Air Management
CT002	Bristol-Burlington Health Department, CT
CT003	City of Meriden, Dept Human Serv, CT
CT004	Dept of Air Poll Ctrl, Bridgeport, CT
CT005	Greenwich Department of Health, CT
CT006	New Haven Health Department, CT
CT007	Norwalk Department of Health, CT
CT008	Stamford Health Department, CT
CT009	Stratford Department of Health, CT
CT999	Other Connecticut

## **DELAWARE**

DE001	Delaware Dept of Natural Res & Env Ctrl
DE999	Other Delaware

# **DISTRICT OF COLUMBIA**

DC001	DC Air Qual Control & Monitoring Branch
DC999	Other District of Columbia

# **FLORIDA**

FL001	Florida Dept of Env Regulation
FL002	Broward Co Ofc of Nat Res Prot, FL
FL003	City of Jacksonville, FL
FL004	Hillsborough Co Env Prot Comm, FL
FL005	Jacksonville, Bio-Environmental Serv, FL

FL006	Manatee County Public Health Unit, FL
FL007	Metro Dade Co Dept of Env Res Mgmt, FL
FL008	Palm Beach County Public Health Unit, FL
FL009	Pinellas Co Dept of Env Mgmt, FL
FL010	Sarasota County Air Program, FL
FL999	Other Florida

# **GEORGIA**

GA001	Georgia Department of Natural Resources
GA999	Other Georgia

# <u>GUAM</u>

GU001	Guam Environmental	Protection Agency
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GU999 Other Guam

# **HAWAII**

HI999 Other Hawaii

# <u>IDAHO</u>

ID001	Idaho De	ept of Health	&	Welfare

ID999 Other Idaho

# **ILLINOIS**

IL001	Illinois EPA, Div of Air Poll Control
IL002	Bedford Park Env Qual Ctrl Board, IL
IL003	Bensenville Air Poll Control Dist, IL
IL004	City of Chicago, Env Prot Div, IL
IL005	City of Evanston-Dept Bldg & Zoning, IL
IL006	Cook Co Dept of Env Control, IL
IL007	Dupage County Health Department, IL
IL008	Village of McCook Env Board, IL

IL999 Other Illinois

## <u>INDIANA</u>

IN001	Indiana Dept of Env Mgmt, Ofc of Air
IN002	Anderson Air Pollution Control Dept, IN
IN003	E. Chicago Dept of Air Qual Control, IN
IN004	Evansville Air Pollution Control, IN

IN005	Gary Air Pollution Control, IN
IN006	Hammond Air Pollution Control Dept, IN
IN007	Indianapolis Air Poll Control Div, IN
IN008	Lake County Air Pollution Control, IN
IN009	St. Joseph County Air Poll Control, IN
IN010	Vigo County Air Pollution Control, IN
IN999	Other Indiana

# <u>IOWA</u>

IA001	Iowa Department of Natural Resources
IA002	Linn County Health Department, IA
IA003	Polk County Physical Planning Dept, IA
14999	Other Iowa

# KANSAS

KS001	Kansas Bureau of Air and Waste Mgmt
KS002	Kansas City/Wyandotte Co Health Dept, KS
KS003	Topeka-Shawnee County Health Agency, KS
KS004	Wichita-Sedgwick Co Comm Health Dept, KS
KS999	Other Kansas

## **KENTUCKY**

KY001	Kentucky DEP, Div for Air Quality
KY002	Jefferson Co APCD, KY
KY999	Other Kentucky

## **LOUISIANA**

LA001	Louisiana Department of Env Quality
I A999	Other Louisiana

#### **MAINE**

ME001	Maine Department of Env Protection
ME999	Other Maine

# <u>MARYLAND</u>

MD001	Maryland Department of the Environment
MD002	Allegany County Health Department, MD
MD003	Anne Arundel Co Air Qual Cont Prog, MD
MD004	Baltimore City Health Department, MD

MD005	Baltimore Co Bur Air Qual/Waste Mgmt, MD
MD006	Frederick County Health Department, MD
MD007	Harford County Health Department, MD
MD008	Howard County Health Department, MD
MD009	Montgomery County DEP, MD
MD010	Prince George's County Health Dept, MD
MD999	Other Maryland

# **MASSACHUSETTS**

MA001	Massachusetts Div of Air Qual Control
MA002	Berkshire and Pioneer Valley APCD, MA
MA003	Boston Air Pollution Control Comm, MA
MA004	Massachusetts DEP, Central Reg Air Qual
MA005	Merrimack Valley & Metro Boston APCD, MA
MA006	SE Massachusetts Air Poll Ctrl Dist, MA
MA999	Other Massachusetts

# **MICHIGAN**

MI001	Michigan Department of Natural Resources
MI002	City of Grand Rapids Env Serv Dept, MI
MI003	Wayne County Air Poll Control Div, MI
MI999	Other Michigan

# **MINNESOTA**

MN001	Minnesota Poll Ctrl Agcy, Air Qual Div
MN002	City of Bloomington, Env Poll Sec, MN
MN003	City of Richfield, Air Poll Ctrl, MN
MN004	Minneapolis Pollution Control Div, MN
MN005	St. Louis Park Inspectional Serv, MN
MN999	Other Minnesota

# **MISSISSIPPI**

MS001	Mississippi Dept of Env Quality
MS999	Other Mississippi

# **MISSOURI**

MO001	Missouri DNR, Air Poll Control Program
MO002	City of St. Louis Air Poll Ctrl, MO
MO003	Greene Co-City of Springfield APCA, MO
MO004	Kansas City, MO, Air Quality Section

MO005	St. Louis Co	Air Poll (	Control E	sr, MO

MO999 Other Missouri

## **MONTANA**

Montana Dept of Environmental Quality
Cascade City-Co Air Poll Ctrl Prog, MT
Missoula City-County Health Dept, MT
Yellowstone County Air Poll Control, MT

MT999 Other Montana

## **NEBRASKA**

NE001	Nebraska Dept of Env Control
NE002	Lincoln-Lancaster Co Health Dept, NE
NE003	Omaha City Air Quality Control Div, NE
NE999	Other Nebraska

#### <u>NEVADA</u>

NV001	Nevada Dept of Cons and Natural Res
NV002	Clark Co Health Dist, Div APC, NV
NV003	Washoe County District Health Dept, NV
NV999	Other Nevada

#### **NEW HAMPSHIRE**

NH001	New	Hampshir	e Dept of	Env Serv,	Air Res

NH999 Other New Hampshire

## **NEW JERSEY**

NJ001	New Jersey Dept of Env Protection
NJ002	City of Elizabeth City Hall, NJ
NJ003	Hudson Regional Health Commission, NJ
NJ004	Middlesex Co Air Poll Ctrl Prog, NJ
NJ999	Other New Jersey

# **NEW MEXICO**

NM001	New Mexico Env Improvement Div/Air Qual
NM002	Albuquerque Env Health & Energy Dept NM
NM999	Other New Mexico

#### NEW YORK

NY001	New York DEC, Div of Air Resources
NY002	Albany County Dept of Health, NY
NY003	Interstate Sanitation Commission, NY
NY004	Monroe County Department of Health, NY
NY005	Nassau Co DOH, Center for Env Prot, NY
NY006	New York City Bureau of Air Res, NY
NY007	Niagara Co Health Dept, Air Res Bur, NY
NY008	Rensselaer Co DOH, Div of Env Health, NY
NY009	Rockland Co DOH, Air Poll Ctrl, NY
NY010	Suffolk Co Ofc of Haz Mat Mgmt, NY
NY011	Westchester County Dept of Health, NY
NY999	Other New York
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## NORTH CAROLINA

NC001	North Carolina Div of Env Mgmt
NC002	Cleveland County Health Department, NC
NC003	Cumberland Co Air Pollution Control, NC
NC004	Forsyth County Env Affairs Dept, NC
NC005	Mecklenburg Co Dept of Env Prot, NC
NC006	W. North Carolina Reg Air Poll Ctrl Bd
NC999	Other North Carolina

#### **NORTH DAKOTA**

ND001 ND999	North Dakota State Department of Health Other North Dakota
<u>OHIO</u>	
OH001	Ohio Environmental Protection Agency
OH002	Akron Reg Air Quality Mgmt Dist, OH
OH003	Canton Air Pollution Control Div, OH
OH004	City of Toledo, Env Services Div, OH
OH005	Cleveland Div of Air Poll Control, OH
OH006	Hamilton Co-Southwestern OH APCA

OH007	Lake County General Health District, OH
OH008	Mahoning-Trumbull Air Poll Ctrl Agcy, OH
OH009	Montgomery Co Reg Air Poll Ctrl Agcy, OH
0.77040	

OH010 North Ohio Valley Air Authority, OH OH011 Portsmouth Local Air Agency, OH

OH012 Dayton Regional Air Poll Ctrl Agency, OH

OH999 Other Ohio

# **OKLAHOMA**

OK001	Oklahoma Air	<b>Quality Service</b>
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OK002 City-Co Health Dept of Oklahoma City OK003 Tulsa City-County Health Department, OK

OK999 Other Oklahoma

#### <u>OREGON</u>

OR001	Oregon Dept of Environmental Quality
OR002	Lane Regional Air Poll Authority, OR
0.000	

OR999 Other Oregon

#### **PENNSYLVANIA**

PA001	Pennsylvania DER, Bur of Air Qual Ctrl
PA002	Allegheny Co Bureau of Air Poll Ctrl, PA
PA003	Philadelphia DOPH, Air Mgmt Serv, PA
D 4 000	O(1, D

PA999 Other Pennsylvania

#### **PUERTO RICO**

PR001 Puerto Rico Env Quality Board

PR999 Other Puerto Rico

#### **RHODE ISLAND**

RI001 Rhode Island Div of Air & Haz Mat

RI999 Other Rhode Island

#### **SOUTH CAROLINA**

SC001	South Carolina Dept of Health & Env Ctrl
SC002	City of Columbia Air Poll Control, SC

SC999 Other South Carolina

## **SOUTH DAKOTA**

SD001 South Dakota Dept of Water & Nat'l Res

SD999 Other South Dakota

#### **TENNESSEE**

TN001 Tennessee Div of Air Pollution Control

TN002	Chattanooga-Hamilton Co APCB, TN
TN003	Knox Co Dept of Air Poll Control, TN
TN004	Memphis and Shelby Co Health Dept, TN
TN005	Metro Health/Nashville & Davidson Co, TN
TNIOOO	Od T

TN999 Other Tennessee

#### **TEXAS**

TX001	Texas Air Control Board
TX002	City of Dallas, Health & Human Serv, TX
TX003	City of Houston, Bureau Air Qual Cont, TX
TX004	El Paso County Health Unit, TX
TX005	Fort Worth Air Pollution Control, TX
TX006	Galveston County Health District, TX
TX007	Harris County Pollution Control Dept, TX
TX008	Lubbock City Health Department, TX
TX999	Other Texas

## <u>UTAH</u>

UT999 Other Utah

## **VERMONT**

VT001 Vermont Air Pollution Control Division

VT999 Other Vermont

# **VIRGIN ISLANDS**

VI001	Virgin	Islands	Dept of	Planning,	Nat Res

VI999 Other Virgin Islands

## **VIRGINIA**

VA001	Virginia Environmental (	Ouality Air Division

VA999 Other Virginia

# **WASHINGTON**

WA001	Washington State Department of Ecology
WA002	Benton-Franklin-Walla Walla Co APA, WA
WA003	Northwest Air Pollution Authority, WA

WA004	Olympic Air Poll Control Authority, WA
WA005	Puget Sound Air Poll Control Agency, WA
WA006	Southwest Air Poll Ctrl Authority, WA
WA007	Spokane Co Air Poll Control Auth, WA
WA008	Yakima County Clean Air Authority, WA
WA999	Other Washington

# WEST VIRGINIA

West Virginia Air Pollution Control Comm Other West Virginia WV001

WV999

# **WISCONSIN**

WI001	Wisconsin Dept of Natural Resources
WI002	Eau Claire City-Co Health Dept, WI
WI003	Madison Department of Public Health, WI
WI004	Milwaukee Co DPW, Env Serv Sec, WI
WI999	Other Wisconsin

# **WYOMING**

WY001	Wyoming Air Qual Div, Dept of Env Qual
WY999	Other Wyoming

# **OTHER**

OT001	National Park Service
OT002	EPA Region I
OT003	EPA Region II
OT004	EPA Region III
OT005	EPA Region IV
OT006	EPA Region V
OT007	EPA Region VI
OT008	EPA Region VII
OT009	EPA Region VIII
OT010	EPA Region IX
OT011	EPA Region X

# APPENDIX C PROCESS TYPE CODE LISTING

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#### Appendix C -- Process Code Listing

**PLEASE NOTE:** The RBLC is currently in the process of re-organizing the Process Type Code (PTC) system. To date, the external combustion sources (formerly PTC 11.xxx) have been modified and are reflected in this list. The new codes include 11.xxx, 12.xxx, 13.xxx, and 14.xxx. The archived external combustion PTCs still be found at the end of this Appendix.

RBLC is currently working on the internal combustion (15.xxx) codes.

#### 10.000 FUEL COMBUSTION

- 11.000 Utility- and Large Industrial-Size Boilers/Furnaces (> 250 MMBtu/h)
- 11.100 Solid Fuel & Solid Fuel Mixtures
  - 11.110 Coal (includes bituminous, subbituminous, anthracite, and lignite)
  - 11.120 Biomass (includes wood, wood waste, bagasse, and other biomass)
  - 11.130 Other Solid Fuel & Solid Fuel Mixtures
- 11.200 Liquid Fuel & Liquid Fuel Mixtures
  - 11.210 Residual Fuel Oil (ASTM # 4,5,6)
  - 11.220 Distillate Fuel Oil (ASTM # 1,2, includes kerosene, aviation, diesel fuel)
  - 11.230 Other Liquid Fuel & Liquid Fuel Mixtures
- 11.300 Gaseous Fuel & Gaseous Fuel Mixtures
  - 11.310 Natural Gas (includes propane and liquefied petroleum gas)
  - 11.320 Other Gaseous Fuel & Gaseous Fuel Mixtures
- 11.900 Other Fuels and Combinations (e.g., solid/liquid, liquid/gas)
- 12.000 Industrial-Size Boilers/Furnaces (> 100 MMBtu/h & <= 250 MMBtu/h)
- 12.100 Solid Fuel & Solid Fuel Mixtures
  - 12.110 Coal (includes bituminous, subbituminous, anthracite, and lignite)
  - 12.120 Biomass (includes wood, wood waste, bagasse, and other biomass)
  - 12.130 Other Solid Fuel & Solid Fuel Mixtures
- 12.200 Liquid Fuel & Liquid Fuel Mixtures
  - 12.210 Residual Fuel Oil (ASTM # 4,5,6)
  - 12.220 Distillate Fuel Oil (ASTM # 1,2, includes kerosene, aviation, diesel fuel)
  - 12.230 Other Liquid Fuel & Liquid Fuel Mixtures
- 12.300 Gaseous Fuel & Gaseous Fuel Mixtures
  - 12.310 Natural Gas (includes propane and liquefied petroleum gas)
  - 12.320 Other Gaseous Fuel & Gaseous Fuel Mixtures
- 12.900 Other Fuels and Combinations (e.g., solid/liquid, liquid/gas)

13.000 Commercial/Institutional-Size Boilers/Furnaces (<= 100 MMBtu/h)

#### 13.100 Solid Fuel & Solid Fuel Mixtures

- 13.110 Coal (includes bituminous, subbituminous, anthracite, and lignite)
- 13.120 Biomass (includes wood, wood waste, bagasse, and other biomass)
- 13.130 Other Solid Fuel & Solid Fuel Mixtures
- 13.200 Liquid Fuel & Liquid Fuel Mixtures
  - 13.210 Residual Fuel Oil (ASTM # 4,5,6)
  - 13.220 Distillate Fuel Oil (ASTM # 1,2, includes kerosene, aviation, diesel fuel)
  - 13.230 Other Liquid Fuel & Liquid Fuel Mixtures
- 13.300 Gaseous Fuel & Gaseous Fuel Mixtures
  - 13.310 Natural Gas (includes propane and liquefied petroleum gas)
  - 13.320 Other Gaseous Fuel & Gaseous Fuel Mixtures
- 13.900 Other Fuels and Combinations (e.g., solid/liquid, liquid/gas)
- 14.000 Miscellaneous Heaters and Furnaces (unknown size)
- 14.100 Solid Fuel & Solid Fuel Mixtures
- 14.200 Liquid Fuel & Liquid Fuel Mixtures
- 14.300 Gaseous Fuel & Gaseous Fuel Mixtures
- 14.900 Other/Unknown Fuels and Combinations (e.g., solid/liquid, liquid/gas)
- 15.000 Large Combustion Turbines (more than 25 MW)
- 15.100 Simple Cycle (turbine alone w/out waste heat recovery)
  - 15.110 Natural Gas (includes propane and liquefied petroleum gas)
  - 15.120 Other Gaseous Fuel & Gaseous Fuel Mixtures
  - 15.130 Liquid Fuel & Liquid Fuel Mixtures
- 15.200 Combined Cycle & Cogeneration
  - 15.210 Natural Gas (includes propane and liquefied petroleum gas)
  - 15.220 Other Gaseous Fuel & Gaseous Fuel Mixtures
  - 15.230 Liquid Fuel & Liquid Fuel Mixtures
- 15.900 Other/Unknown Cycle and/or Fuel

#### PROCESS TYPE

#### 16.000 Small Combustion Turbines (25 MW or less)

16.100 Simple Cycle (turbine alone w/out waste heat recovery)

16.110 Natural Gas (includes propane and liquefied petroleum gas)

16.120 Other Gaseous Fuel & Gaseous Fuel Mixtures

16.130 Liquid Fuel & Liquid Fuel Mixtures

16.200 Combined Cycle & Cogeneration

16.210 Natural Gas (includes propane and liquefied petroleum gas)

16.220 Other Gaseous Fuel & Gaseous Fuel Mixtures

16.230 Liquid Fuel & Liquid Fuel Mixtures

16.900 Other/Unknown Cycle and/or Fuel

#### 17.000 Internal Combustion Engines

17.100 Large Internal Combustion Engines (more than 500 horsepower)

17.110 Fuel Oil (ASTM #1,2, includes kerosene, aviation, diesel fuel)

17.120 Other Liquid Fuel & Liquid Fuel Mixtures

17.130 Natural Gas (includes propane and liquified petroleum gas)

17.140 Other Gaseous Fuel & Gaseous Fuel Mixtures

17.150 Other/Unknown Fuel

17.200 Small Internal Combustion Engines (500 horsepower or less)

17.210 Fuel Oil (ASTM #1,2, includes kerosene, aviation, diesel fuel)

17.220 Other Liquid Fuel & Liquid Fuel Mixtures

17.230 Natural Gas (includes propane and liquified petroleum gas)

17.240 Other Gaseous Fuel & Gaseous Fuel Mixtures

17.250 Other/Unknown Fuel

#### 18.000 (reserved)

19.000 Miscellaneous Combustion

19.100 Misc. Boilers, Furnaces, Heaters

19.200 Misc. Combustion Turbines

19.300 Misc. Internal Combustion Engines

19.900 Other Misc. Combustion

#### 20.000 WASTE DISPOSAL

#### 21.000 MUNICIPAL WASTE

- 21.001 Municipal Waste Combustors/Incinerators
- 21.002 Municipal Waste Landfills
- 21.003 Publicly Owned Treatment Works (POTW) Emissions (except 21.004)
- 21.004 Sewage Sludge Incineration
- 21.999 Other Municipal Waste Processing/Disposal Facilities

#### 22.000 HAZARDOUS WASTE

- 22.007 Asbestos Demolition, Renovation, and Disposal
- 22.001 Benzene Waste Treatment
- 22.006 Contaminated Soil Treatment
- 22.002 Hazardous Waste Incineration
- 22.003 Hazardous Waste Landfills
- 22.004 Site Remediation
- 22.005 Treatment, Storage and Disposal Facilities (TSDF) (except 22.002, 22.003 & 22.006)
- 22.999 Other Hazardous Waste Processing/Disposal Facilities

#### 29.000 OTHER WASTE DISPOSAL (except 21 & 22)

- 29.001 Automobile Body Shredding/Incineration
- 29.002 Industrial Wastewater/Contaminated Water Treatment
- 29.003 Industrial Landfills
- 29.004 Medical/Infectious Waste Incineration
- 29.999 Other Waste Disposal Sources

#### 30.000 WOOD PRODUCTS INDUSTRY

30.001 Charcoal

30.002 Kraft Pulp Mills

- 30.003 Plywood and Veneer Operations
- 30.004 Pulp and Paper Production other than Kraft
- 30.005 Reconstituted Panelboard Plants (waferboard, particleboard, etc.)
- 30.006 Wood Treatment
- 30.007 Woodworking
- 30.999 Other Wood Products Industry Sources

#### 40.000 ORGANIC EVAPORATIVE LOSSES

#### 41.000 SURFACE COATING/PRINTING/GRAPHIC ARTS

- 41.001 Aerospace Surface Coating
- 41.002 Automobiles and Trucks Surface Coating (OEM)
- 41.003 Automotive Refinishing
- 41.004 Can Surface Coating
- 41.005 Fabric Coating/Printing/Dyeing (except 41.017)
- 41.006 Flatwood Paneling Surface Coating
- 41.007 Flexible Vinyl & Urethane Coating/Printing
- 41.008 Large Appliance Surface Coating
- 41.026 Leather Surface Coating
- 41.009 Magnetic Tape Surface Coating
- 41.010 Magnetic Wire Surface Coating
- 41.011 Metal Coil Surface Coating
- 41.012 Metal Furniture Surface Coating
- 41.013 Miscellaneous Metal Parts and Products Surface Coating
- 41.014 Paper, Plastic & Foil Web Surface Coating (except 41.007 & 41.018)
- 41.015 Plastic Parts for Business Machines Surface Coating
- 41.016 Plastic Parts & Products Surface Coating (except 41.015)
- 41.017 Polymeric Coating of Fabrics
- 41.018 Pressure Sensitive Tapes and Labels Coating
- 41.019 Printing Forms
- 41.020 Printing News Print
- 41.021 Printing Packaging
- 41.022 Printing Publication
- 41.023 Printing/Publication (except 41.007 & 41.019-022)
- 41.024 Ship Building & Repair Surface Coating
- 41.025 Wood Products/Furniture Surface Coating (except 41.006)

#### 41.999 Other Surface Coating/Printing/Graphic Arts Sources

#### 42.000 LIQUID MARKETING (PETROLEUM PRODUCTS, GASOLINE, VOL)

- 42.001 Gasoline Bulk Plants
- 42.002 Gasoline Bulk Terminals
- 42.003 Gasoline Marketing (except 42.001 & 42.002)
- 42.004 Petroleum Liquid Marketing (except 42.001-003 & 42.005-006)
- 42.005 Petroleum Liquid Storage in Fixed Roof Tanks
- 42.006 Petroleum Liquid Storage in Floating Roof Tanks
- 42.009 Volatile Organic Liquid Storage
- 42.010 Volatile Organic Liquid Marketing (except 42.009)
- 42.999 Other Liquid Marketing Sources

#### 49.000 ORGANIC EVAPORATIVE LOSSES (except 41 & 42)

- 49.001 Aerosol Can Filling
- 49.012 Architectural & Industrial Maintenance (AIM) Coatings
- 49.013 Automobile Refinish Coatings
- 49.011 Consumer Products
- 49.002 Dry Cleaning PERC/Chlorinated Solvents
- 49.003 Dry Cleaning Petroleum Solvents
- 49.004 Fiberglass Boat Manufacturing
- 49.005 Fiberglass/Reinforced Polymer Products Manufacturing (except 49.004)
- 49.006 Halogenated Solvent Cleaners
- 49.007 Ink Manufacturing
- 49.008 Organic Solvent Cleaning & Degreasing (except 49.006)
- 49.009 Paint/Coating/Adhesives Manufacturing
- 49.010 Paint Stripping
- 49.999 Other Organic Evaporative Loss Sources

#### 50,000 PETROLEUM/NATURAL GAS PRODUCTION AND REFINING

- 50.001 Oil and Gas Field Services
- 50.002 Natural Gas/Gasoline Processing Plants
- 50.003 Petroleum Refining Conversion Processes (cracking, CO boilers, reforming, alkylation,

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- polymerization, isomerization, coking)
- 50.007 Petroleum Refining Equipment Leaks/Fugitive Emissions
- 50.004 Petroleum Refining Feedstock (blending, loading and unloading)
- 50.008 Petroleum Refining Flares and Incinerators (except acid gas/sulfur recovery unit incinerators 50.006)
- 50.005 Petroleum Refining Separation Processes (distillation and light ends recovery)
- 50.006 Petroleum Refining Treating Processes (hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, deasphalting, sulfur recovery units, acid gas/sulfur recovery unit incinerators)
- 50.009 Petroleum Refining Wastewater and Wastewater Treatment
- 50.010 Shale Processing
- 50.999 Other Petroleum/Natural Gas Production & Refining Sources (except 50.001-010 and 42.000
  - Liquid Marketing

#### 60.000 CHEMICALS MANUFACTURING

#### 61.000 AGRICULTURAL CHEMICALS MANUFACTURING

- 61.001 2,4-D Salts and Esters Production
- 61.002 4-Chloro-2-Methylphenoxyacetic Acid Production
- 61.003 4,6-Dinitro-o-Cresol Production
- 61.004 Captafol (tm) Production
- 61.005 Captan (tm) Production
- 61.006 Chloroneb (tm) Production
- 61.007 Chlorthalonil (tm) Production
- 61.008 Dacthal (tm) Production
- 61.012 Fertilizer Production (except 61.009)
- 61.009 Phosphate Fertilizers Production
- 61.010 Sodium Pentachlorophenate Production
- 61.011 Tordon Acid Production
- 61.999 Other Agricultural Chemical Manufacturing Sources

#### 62.000 INORGANIC CHEMICALS MANUFACTURING

- 62.001 Ammonium Sulfate Production Caprolactam By-Product Plants
- 62.002 Antimony Oxides Manufacturing

- 62.003 Chlorine Production
- 62.016 Chloroalkali Production
- 62.004 Chromium Chemicals Manufacturing
- 62.005 Cyanuric Chemicals Manufacturing
- 62.006 Fume Silica Production
- 62.007 Hydrochloric Acid Production
- 62.017 Hydrofluoric Acid Production
- 62.008 Hydrogen Cyanide Production
- 62.009 Hydrogen Fluoride Production
- 62.020 Inorganic Liquid/Gas Storage & Handling
- 62.014 Nitric Acid Plants
- 62.010 Phosphoric Acid Manufacturing
- 62.011 Quaternary Ammonium Compounds Production
- 62.018 Sodium Carbonate Production
- 62.012 Sodium Cyanide Production
- 62.015 Sulfuric Acid Plants
- 62.019 Sulfur Recovery (except 50.006)
- 62.013 Uranium Hexafluoride Production
- 62.999 Other Inorganic Chemical Manufacturing Sources

#### 63.000 POLYMER AND RESIN PRODUCTION

- 63.001 Acetal Resins Production
- 63.002 Acrylonitrile-Butadiene-Styrene Production
- 63.003 Alkyd Resins Production
- 63.004 Amino Resins Production
- 63.005 Butadiene-Furfural Cotrimer (R-11)
- 63.006 Butyl Rubber Production
- 63.007 Carboxymethylcellulose Production
- 63.008 Cellophane Production
- 63.009 Cellulose Ethers Production
- 63.010 Epichlorohydrin Elastomers Production
- 63.011 Epoxy Resins Production
- 63.012 Ethylene-propylene Rubber Production
- 63.013 Flexible Polyurethane Foam Production
- 63.014 Hypalon (tm) Production
- 63.015 Maleic Copolymers Production
- 63.016 Methylcellulose Production

- 63.017 Methyl Methacrylate-Acrylonitrile-Butadiene-Styrene Production
- 63.018 Methyl Methacrylate-Butadiene-Styrene Terpolymers Production
- 63.019 Neoprene Production
- 63.020 Nitrile Butadiene Rubber Production
- 63.021 Non-Nylon Polyamides Production
- 63.022 Nylon 6 Production
- 63.023 Phenolic Resins Production
- 63.024 Polybutadiene Rubber Production
- 63.025 Polycarbonates Production
- 63.026 Polyester Resins Production
- 63.027 Polyether Polyols Production
- 63.028 Polyethylene Terephthalate Production
- 63.029 Polymerized Vinylidene Production
- 63.030 Polymethyl Methacrylate Resins Production
- 63.031 Polystyrene Production
- 63.032 Polysulfide Rubber Production
- 63.033 Polyvinyl Acetate Emulsions Production
- 63.034 Polyvinyl Alcohol Production
- 63.035 Polyvinyl Butyral Production
- 63.036 Polyvinyl Chloride and Copolymers Production
- 63.037 Reinforced Plastic Composites Production
- 63.038 Styrene-Acrylonitrile Production
- 63.039 Styrene Butadiene Rubber and Latex Production
- 63.999 Other Polymer and Resin Manufacturing Sources

#### 64.000 SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI)

- 64.001 Batch Reaction Vessels (except 69.011)
- 64.002 Equipment Leaks (valves, compressors, pumps, etc.)
- 64.003 Processes Vents (emissions from air oxidation, distillation, and other reaction vessels)
- 64.004 Storage Tanks (SOCMI Chemicals (loading/unloading, filling, etc.)
- 64.005 Transfer of SOCMI Chemicals (loading/unloading, filling, etc.)
- 64.006 Wastewater Collection & Treatment
- 64.999 Other SOCMI Industry Sources

#### 65.000 SYNTHETIC FIBERS PRODUCTION

65 (	001	Acrylic	Fibers	/Modacry	vlic Fibers	Production
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- 65.002 Rayon Production
- 65.003 Spandex Production
- 65.999 Other Synthetic Fibers Production Sources

#### 69.000 CHEMICAL MANUFACTURING (except 61, 62, 63, 64 & 65)

- 69.001 Benzyltrimethylammonium Chloride Facilities
- 69.002 Butadiene Dimers Production
- 69.015 Carbon Black Manufacturing
- 69.003 Carbonyl Sulfide Production
- 69.004 Chelating Agents Production
- 69.005 Chlorinated Paraffins Production
- 69.006 Dodecanedioic Acid Production
- 69.007 Ethylidene Norbornene Production
- 69.008 Explosives Production
- 69.009 Hydrazine Production
- 69.010 OBPA/1,3-Diisocyanate Production
- 69.011 Pharmaceuticals Production
- 69.012 Photographic Chemicals Production
- 69.013 Phthalate Plasticizers Production
- 69.017 Propellant Manufacturing & Production
- 69.014 Rubber Chemicals Manufacturing
- 69.016 Soap & Detergent Manufacturing
- 69.999 Other Chemical Manufacturing Sources

### 70.000 FOOD AND AGRICULTURAL PRODUCTS (also see 61 - AGRICULTURAL CHEMICALS)

- 70.016 Alcohol Fuel Production
- 70.008 Alcoholic Beverages Production
- 70.001 Alfalfa Dehydrating
- 70.002 Baker's Yeast Manufacturing
- 70.003 Bread Bakeries
- 70.004 Cellulose Food Casing Manufacturing
- 70.005 Coffee Roasting
- 70.006 Cotton Ginning

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- 70.007 Feed and Grain Handling, Storage & Processing (including Mills and Elevators)
- 70.009 Fish Processing
- 70.010 Fruit and Vegetable Processing
- 70.011 Meat Smokehouses
- 70.012 Roasting (except 70.005)
- 70.013 Starch Manufacturing
- 70.014 Sugar Cane Processing
- 70.015 Vegetable Oil Production
- 70.999 Other Food and Agricultural Products Sources

#### 80.000 METALLURGICAL INDUSTRY

#### 81.000 FERROUS METALS INDUSTRY

- 81.001 Coke By-product Plants
- 81.002 Coke Production (except 81.001)
- 81.003 Ferroalloy Production
- 81.004 Iron Foundries
- 81.005 Stainless Steel/Specialty Steel Manufacturing
- 81.006 Steel Foundries
- 81.007 Steel Manufacturing (except 81.005 & 81.006)
- 81.008 Steel Pickling HCL Process
- 81.999 Other Ferrous Metals Industry Sources

#### 82.000 NONFERROUS METALS INDUSTRY

- 82.016 Beryllium Processing and Manufacturing
- 82.001 Lead Acid Battery Manufacturing
- 82.002 Lead Acid Battery Reclamation
- 82.003 Lead Oxide and Pigment Production
- 82.004 Lead Products (except 82.001-002, 82.006 & 82.012)
- 82.005 Primary Aluminum Production
- 82.006 Primary Copper Smelting
- 82.007 Primary Lead Smelting
- 82.008 Primary Magnesium Refining

- 82.009 Primary Zinc Smelting
- 82.010 Secondary Aluminum Production
- 82.011 Secondary Brass & Brass Ingot Production
- 82.012 Secondary Copper Smelting & Alloying
- 82.013 Secondary Lead Smelting
- 82.014 Secondary Magnesium Smelting
- 82.015 Secondary Zinc Processing
- 82.999 Other Non-Ferrous Metals Industry Sources

#### 90.000 MINERAL PRODUCTS

- 90.001 Alumina Processing
- 90.035 Asbestos Manufacturing
- 90.002 Asphalt/Coal Tar Application Metal Pipes
- 90.003 Asphalt Concrete Manufacturing
- 90.004 Asphalt Processing (except 90.002, 90.003 & 90.034)
- 90.034 Asphalt Roofing Products Manufacturing
- 90.017 Calciners & Dryers and Mineral Processing Facilities
- 90.005 Calcium Carbide Manufacturing
- 90.006 Cement Manufacturing (except 90.028)
- 90.007 Chromium Refractories Production
- 90.008 Clay and Fly Ash Sintering
- 90.009 Clay Products (including Bricks & Ceramics)
- 90.010 Coal Conversion/Gasification
- 90.011 Coal Handling/Processing/Preparation/Cleaning
- 90.012 Concrete Batch Plants
- 90.013 Elemental Phosphorous Plants
- 90.014 Frit Manufacturing
- 90.015 Glass Fiber Manufacturing (except 90.033)
- 90.016 Glass Manufacturing
- 90.017 Calciners
- 90.018 Lead Ore Crushing and Grinding
- 90.019 Lime/Limestone Handling/Kilns/Storage/Manufacturing
- 90.020 Mercury Ore Processing
- 90.021 Metallic Mineral/Ore Processing (except 90.018, 90.020 & 90.031)
- 90.022 Mineral Wool Manufacturing
- 90.023 Mining Operations (except 90.032)
- 90.024 Non-metallic Mineral Processing (except 90.011, 90.019, 90.017, 90.026) (NOTE: This

\_\_\_\_\_

category includes stone quarrying, sand and gravel processing, gypsum processing, perlite processing and all other non-metallic mineral/ore processing.)

- 90.026 Phosphate Rock Processing
- 90.027 Phosphogypsum Stacks
- 90.028 Portland Cement Manufacturing
- 90.029 Refractories
- 90.031 Taconite Iron Ore Processing
- 90.032 Underground Uranium Mines
- 90.033 Wool Fiberglass Manufacturing
- 90.999 Other Mineral Processing Sources

#### 99.000 MISCELLANEOUS SOURCES

- 99.001 Abrasive Blasting
- 99.002 Chromic Acid Anodizing
- 99.003 Comfort Cooling Towers
- 99.004 Commercial Sterilization Facilities
- 99.005 Decorative Chromium Electroplating
- 99.006 Electronics Manufacturing (except 99.011)
- 99.013 Electroplating/Plating (except Chrome 99.002, 99.005 & 99.007)
- 99.019 Geothermal Power
- 99.007 Hard Chromium Electroplating
- 99.008 Hospital Sterilization Facilities
- 99.009 Industrial Process Cooling Towers
- 99.017 Leather Tanning
- 99.014 Polystyrene Foam Products Manufacturing
- 99.016 Polyurethane Foam Products Manufacturing
- 99.020 Rocket Demilitarization
- 99.010 Rocket Engine Test Firing
- 99.015 Rubber Tire Manufacturing and Retreading
- 99.011 Semiconductor Manufacturing
- 99.018 Synthetic Fuels Production (except 70.016 & 90.010)
- 99.012 Welding & Grinding
- 99.999 Other Miscellaneous Sources

#### **ARCHIVED CODES:**

#### 11.000 EXTERNAL COMBUSTION

- 11.001 Bagasses Combustion
- 11.002 Coal Combustion
- 11.006 Fuel Oil Combustion
- 11.003 Lignite Combustion
- 11.004 Multiple Fuels Combustion
- 11.005 Natural Gas Combustion
- 11.007 Waste Oil Combustion
- 11.008 Wood/Wood Waste Combustion
- 11.999 Other External Combustion Sources

#### 15.000 INTERNAL COMBUSTION

- 15.001 Aviation Fuels
- 15.002 Diesel Fuel
- 15.006 Fuel Oil
- 15.003 Gasoline
- 15.007 Multiple Fuels
- 15.004 Natural Gas
- 15.005 Process Gas
- 15.999 Other Internal Combustion Sources

# APPENDIX D ABBREVIATIONS FOR PROCESSES, UNITS, AND POLLUTANTS



#### Appendix D -- Abbreviations for Processes, Units, and Pollutants

#### Abbreviations for Processes and Descriptors

<u>Abbreviation</u> <u>Process or Descriptor</u>

ADD additive
AL aluminum
AM American
ASSOC association
ATMOS atmospheric
CALC catalytic

CEM continuous emission monitoring

CO company **COLL** collection **COOP** cooperative **CORP** corporation decarbonization **DECARB DESULF** desulfurization **DISTIL** distillation **DISTN** distribution DIV division Ε eastern EA each **EFF** efficiency **ELECT** electric **EMISS** emissions **ENVIRON OR ENV** environmental

ESP electrostatic precipitator

FAC facility

FCC fluid catalytic cracking
FCCU fluid catalytic cracking unit
FGR flue gas recirculation

FURN furnace
GEN generator
HAND handling

HRSG heat recovery steam generator

HVLP high-volume, low pressure (spray guns)

I.C. internal combustion

INCIN incinerator
INDEP independent
INTERNAT international
LAB laboratory
LDOUT loadout

Abbreviation Process or Descriptor

liquid LIQ light LT **MATL** material **MFG** manufacturing **MISC** miscellaneous **MODIF** modification NAT natural **NATL** national

POLL pollution

preparation **PREP** production **PROD PWR** power **REC** recovery **RECIP** reciprocating reclamation **RECLAM** refrigeration **REFIG REFIN** refinery **REG** regular regenerator **REGEN** residual **RESID** 

ROT rotary
SCR selective catalytic reduction

SCRUB scrubber
SECOND secondary
SHIP shipping

SNCR selective non-catalytic reduction

SOLN solution STOR storage

SUP supplementary

SYS system
TRANS transmission
UNIV university
VAC vacuum
VERT vertical

#### Abbreviations for Emission Limit Units

<u>Abbreviation</u> <u>Emission Limit Unit</u>

ACF actual cubic feet

ACFM actual cubic feet per minute ACS applied coating solids

ADP air dried pulp

ADTP air dried tons product

ADTFP air dried tons of final product
ADTUBP air dried tons of unbleached pulp

ADUP air dried unbleached pulp

AMP-H ampere hours
AV average
BBL barrels
BF board feet

BHP brake horsepower
BLS black liquor solids
BPSD barrels per stream day
BTU British thermal units

CF cubic feet

CFM cubic feet per minute

CUYD cubic yard D day DFEED dry feed

DACF dry actual cubic feet

DIST distillate

DSCF dry standard cubic feet

 $\begin{array}{ccc} F & & \text{feet} \\ G & & \text{gram} \end{array}$ 

G/B-HP-H grams per brake horsepower-hour G/HP-H grams per horsepower-hour

G/O gas/oil GAL gallon

GAL/M gallons per minute GIGA giga-  $(10^9 prefix)$ 

GR grains H hour

HP horsepower

J joule KG kilogram KW kilowatt L liter LB pound LT long ton

<u>Abbreviation</u> <u>Emission Limit Unit</u>

 $\overline{M}$  thousand  $(10^3)$ 

MI miles MIN minute

 $\begin{array}{ccc} MG/L & milligram \ per \ liter \\ MM & million \ (10^6) \\ MO & month \\ MW & megawatt \end{array}$ 

UG microgram  $(10^{-6})$ 

N natural

NG nanogram (10<sup>-9</sup>)

OPAC opacity

PPM parts per million
PPH parts per hundred

% percent
% BY VOL % by volume
% BY WT % by weight
RDF refuse derived fuel

RESID residual

SB subbituminous SCF standard cubic feet

SCFD standard cubic feet per day
SCFH standard cubic feet per hour
SCFM standard cubic feet per minute

SEC second SQF square feet

 $T \hspace{1cm} ton \\$ 

T/D tons per day T/H tons per hour tons per year T/YR **TONNE** metric tonne **VOL** volume weeks **WKS** YD yard YR year

#### Abbreviations for Pollutants

AbbreviationPollutantAGsilverANacrylonitrileARargonASarsenicBAbarium

BAP benzo(a)pyrene
BE beryllium
CA calcium
CD cadmium

CDD chlorodibenzodioxins
CDF chlorodibenzofurans

CL chlorine CL2 chlorine (gas)

CL2/OCL chlorine and oxychlorine

CLO2 chlorine dioxide
CO carbon monoxide
CO2 carbon dioxide
COS carbonyl sulfide
CR chromium

CRVI hexavalent chrome

CS cesium CU copper

DCB 1,4-dichloro-2-butene

ETH ethylene ETO ethylene oxide

F fluorine

TF fluorides, total

FSP fine suspended particulates

HBR hydrogen bromide
HC hydrocarbons
HCL hydrochloric acid
HCN hydrogen cyanide

HDM hexamethylene diisocyanate monomer

HF hydrogen fluoride

HG mercury

HHD homopolymer of HDM (see above)

H2O water

H2S hydrogen sulfide H2SO4 sulfuric acid

H2SO4 mist sulfuric acid mist (also referred to as SAM)

MA maleic anhydride

**Abbreviation** Pollutant

MC ACETATE methyl cellusolve acetate MEK methyl ethyl ketone

MG magnesium

MI KETONE methyl isobutyl ketone
MMH methyl hydrazine
MN manganese
MO molybdenum

NAOH sodium hydroxide NA2SO4 salt cake

NA2SO4 salt cake NH3 ammonia NH4 ammonium

NH4CL ammonium chloride

NI nickel

NMHC nonmethane hydrocarbons NMOC nonmethane organic carbon

NOX nitrogen oxide NO2 nitrogen dioxide N2O nitrous oxide

PAH polynuclear aromatic hydrocarbons

PB lead

PCB polychlorinated biphenyls
PCDF polychlorinated dibenzo furans
PCNB pentochloronitrobenzene herbicide

PM, PM10 particulate matter

POCL3 phosphorous oxychloride

POHC principle organic hazardous constituents

RHC reactive hydrocarbons

ROC reactive organic compounds
ROG reactive organic gases
RSC reduced sulfur compounds

S sulfur
SB antimony
SE selenium
SN tin

SO2 sulfur dioxide SO3 sulfur trioxide

TCDD 2,3,7,8-tetrachlorodibenzo-P-dioxin

TCDF tetrachlorodibenzo furan

TCE trichloroethylene
TC-ETHANE 1,1,1-trichloroethane
TF Total Fluorides

TICL4 titanium tetrachloride

TMT tetramethyl tin

**Abbreviation Pollutant** 

TRS total reduced sulfur

U uranium

UF4 uranium tetrafluoride

V vanadium VC vinyl chloride

VCM vinyl chloride monomer

VE visible emissions

VOC volatile organic compounds

ZN zinc

ZRSO4 zirconium sulfate

Pollutant Name and CAS Number
See also the previous table, Abbreviations for Pollutants

<u>POLLUTANT</u>	ALTERNATE NAME	CAS NUMBER
1,1,1 TRICHLOROETHANE 2,3,7,8 TCDD 2-BUTANONE	2,3,7,8-tetrachlorodibenzo-P-dioxin	71-55-6 1746-01-6 78-93-3
ACETONE		67-64-1
ACRYLAMIDE		79-06-1
ACRYLAMIDE MONOMER		79-06-1
ACRYLIC ACID		79-10-7
ACRYLONITRILE		107-13-1
AG	Silver	7440-22-4
ALUMINUM OXIDE		1344-28-1
AMMONIA		7664-41-7
AN	Acrylonitrile	107-13-1
AR	Argon	13994-71-3
ARGON		13994-71-3
AS	Arsenic	7440-38-2
ASBESTOS		1332-21-4
BA	Barium	7440-39-3
BAP	Benzo(a)pyrene	50-32-8
BE	Beryllium	7440-41-7
BENZENE		71-43-2
BENZO-A-PYRENE		50-32-8
BENZOTRICHLORIDE		98-07-7
BENZYL CHLORIDE		100-44-7
BR	Bromine	7726-95-6
BUTYL ACETATE		123-86-4
BZ	Benzene	71-43-2
CA	Calcium	7440-70-2
CALCIUM HYDROXIDE		1035-62-0
CAPROLACTAM		105-60-2
CARBON BLACK		1333-86-4
CARBON TETRACHLORIDE		56-23-5
CCL2F2	Dichlorodifluoromethane	75-71-8
CD	Cadmium	7440-43-9
CHCL3	Chloroform	67-66-3
CHLORINE		7782-50-5
CHLORINE DIOXIDE		10049-04-4
CHLOROFORM		67-66-3
CHROME	Chromium	7440-47-3
CHROMIC ACID		1333-82-0

CL	Chlorine	7782-50-5
CL2	Chlorine (gas)	10049-04-4
CO	Carbon Monoxide	630-08-0
CO2	Carbon Dioxide	124-38-9
COBALT		7440-48-4
CR	Chromium	7440-47-3
CRO3	Chromium Trioxide	1333-82-0
CS	Cesium	7440-46-2
CU	Copper	7440-50-8
DCB	1,4-dichloro-2-butene	764-41-0
DCB	1, 1 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d	25321-22-6
DIBUTYL PHTHALATE		84-72-2
DIISOBUTYL KETONE		108-83-8
DIMETHYL ACETAMIDE		127-19-5
DIMETHYL FORMAMIDE		68-12-2
DIOXINS		SEQ. 128
ETHYL ACETATE		141-78-6
ETHYL ALCOHOL		64-17-5
ETHYL BENZENE		100-41-4
ETHYLBENZENE		100-41-4
ETHYLENE GLYCOL		107-21-1
ETHYLENE OXIDE		75-21-8
ETO	Ethylene Oxide	75-21-8
F	Fluorine	7782-41-4
FLUORIDE		16984-48-8
FLUORIDES		16984-48-8
FORMALDEHYDE		50-00-0
FREON 12		75-71-8
GRAPHITE		7782-42-5
H2O	Water	7732-18-5
H2S	Hydrogen Sulfide	7783-06-4
H2SO4	Sulfuric Acid	7664-93-9
H2SO4 MIST		7664-93-9
H2SO4 VAPORS		7664-93-9
HBR	Hydrogen Bromide	10035-10-6
HC	•	SEQ. 11
HCL	Hydrochloric Acid	7647-01-0
HCN	Hydrogen Cyanide	7490-8
HEPTANE		142-82-5
HF	Hydrogen Fluoride	7664-39-3
HG	Mercury	7439-97-6
HYDRAZINE		302-01-2
HYDROGEN PEROXIDE		7722-84-1
ISOOCTYL ALCOHOL		52738-99-5

ISOPROPYL ACETATE ISOPROPYL ALCOHOL MAGNESIUM MALEIC ANHYDRIDE MEK MEK-PEROXIDE METHACRYLIC ACID METHANE METHANOL METHYL AMYL KETONE METHYL BROMIDE METHYL ETHYL KETONE	Methyl Ethyl Ketone Methyl Ethyl Ketone Peroxide	94-11-1 67-63-0 7439-95-4 108-31-6 78-93-3 1338-23-4 79-41-4 74-82-8 67-56-1 110-43-0 74-83-9 78-93-3
METHYL ISOBUTYL KETONE		108-10-1
METHYLENE CHORIDE		75-09-2
MG	Magnesium	7439-95-4
MINERAL SPIRITS		64475-85-0
MMH	Methyl Hydrazine	60-34-4
MN	Manganese	7439-96-5
MO	Molybdenum	7439-98-7
N-BUTYL ACETATE		123-86-4
N-BUTYL ALCOHOL		71-36-3
N-PROPYL ACETATE		109-60-4
N2O	Nitrous Oxide	10024-97-2
NAOH	Sodium Hydroxide	1310-73-2
NAPHTHALENE		91-20-3
NH3	Ammonia	7664-41-7
NH4	Ammonium	14798-03-9
NH4CL	Ammonium Chloride	12125-02-5
NI	Nickel	7440-02-0
NICKEL		7440-02-0
NITRIC ACID		7697-37-2
NO2	Nitrogen Dioxide	10102-44-0
P-TOLUIDINE		106-49-0
PAH	Polynuclear Aromatic Hydrocarbons	-
PB	Lead	7439-92-1
PCB	Polychlorinated Biphenyls	1336-36-3
PERCHLOROETHYLENE		127-18-4
PHENOL		108-95-2
PHOSPHORIC ACID		7664-38-2
PHOSPHOROUS		7723-14-0
POCL3	Phosphorous Oxychloride	10025-87-3
POTASSIUM HYDROXIDE		1310-58-3
PROPYLENE OXIDE		75-56-9
S	Sulfur	7704-34-9

SB	Antimony	7440-36-0
SE	Selenium	7782-49-2
SILVER		7440-22-4
SN	Tin	7440-31-5
SO2	Sulfur Dioxide	7446-09-5
SO3	Sulfur Trioxide	7446-11-9
SODIUM BICHROMATE		10588-01-9
STRONTIUM CHROMATE		7789-06-2
STYRENE		100-42-5
SULFATES		14808-79-8
SULFURIC ACID		7664-93-9
SULFURIC ACID MIST		7664-93-9
TCDD	2,3,7,8-tetrachlorodibenzo-P-dioxin	1746-01-6
TICL4	Titanium Tetrachloride	7550-45-0
TITANIUM DIOXIDE		13463-67-7
TL	Thallium	7440-28-0
TOLUENE		108-88-3
TRICHLOROETHYLENE		79-01-6
TRIETHYLAMINE		121-44-8
U	Uranium	7440-61-1
UF4	Uranium Tetrafluoride	10049-14-6
URANIUM		7440-61-1
V	Vanadium	7440-62-2
XYLENE		1330-20-7
XYLENES		1330-20-7
ZINC		7440-66-6
ZINC CHROMATE		13530-65-9
ZN	Zinc	7440-66-6

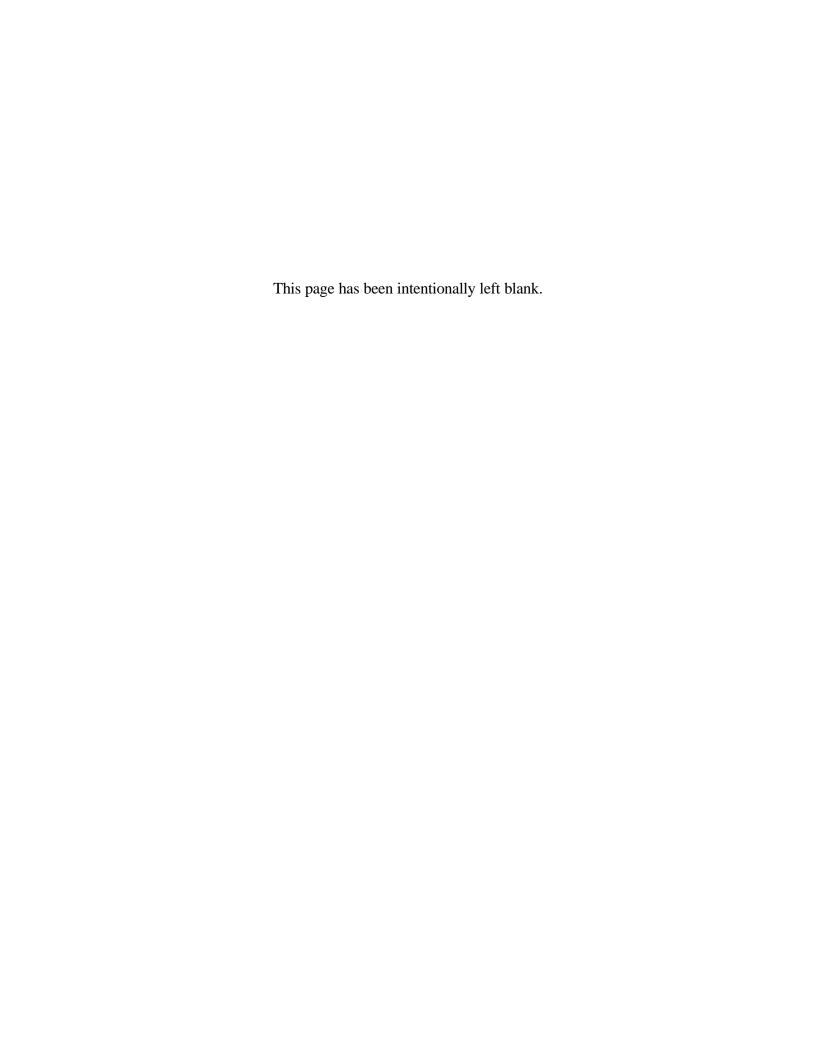
#### **Basis for Limit**

BACT-PSD	Prevention of Significant Deterioration
BACT-Other	Other (i.e., T-BACT, Toxics-BACT, etc)
LAER	Lowest Available Control Technology
MACT	Maximum Achievable Control Technology
RACT	Reasonably Available Control Technology
GACT	Generally Available Control Technology
NSPS	New Source Performance Standards
NESHAPS	National Emission Standards for Hazardous Air Pollutants
OTHER	Other Control Technology Standards

### Emission Type

Point, Fugitive, or Area Source

## APPENDIX E RBLC STANDARD EMISSION UNITS BY PROCESS TYPE CODE



#### Appendix E -- RBLC Standard Emission Units by Process Type Code

Standard emission units have been established for the processes listed below. These units are required for reporting standardized emission limits in the RBLC data base for these processes. Standardization of emission units facilitates ranking of emission control requirements on a pollutant specific basis. For visible emissions (VE), percent (%) opacity has been established as the standardized unit for all processes

Clearinghous Process Code ALL	se e / Name or Description All Processes with Emission Limits for Visible Emissions	Pollutant Visible Emissions	Required Emission Units % Opacity
11.001 - 14.999	Electric Utility Steam Generators, Fossil Fuel-fired Steam Generators, Boilers, Furnaces, & Process Heaters	PM, PM10, PM2.5, SOx, NOx, CO	LB/MMBTU
15.001 - 19.999	I. C. Engines Stationary Gas Turbines	NOx, CO NOx, CO	G/B-HP-H PPM @ 15% O <sub>2</sub>
21.001 21.004	Municipal Waste Incinerators  Sewage Sludge Incineration	PM, PM10, PM2.5 & Metals (CD, PB, HG) SO2, HCL, CO, & NOx PM, PM10 &	GR/DSCF @ 7% O <sub>2</sub> PPM @ 7% O <sub>2</sub> LB/T of dry sludge input
30.002	Kraft Pulp Mills - Recovery Furnace	PM2.5 PM, PM10 & PM2.5	GR/DSCF @ 8% O <sub>2</sub>
	Kraft Pulp Mills - Lime Kiln	PM, PM10 & PM2.5	GR/DSCF @ 10% O <sub>2</sub>
	Kraft Pulp Mills - Smelt Dissolving Tanks	PM. PM10 & PM2.5	LB/T BLS
	Kraft Pulp Mills - Digesters, Brown Stock Washers, Evaporators, Oxidation, & Stripping System	TRS	PPMV @ 10% O <sub>2</sub>
41.002 41.004	Auto & Light Truck Surface Coating Can Surface Coating	VOC VOC	LB/GAL ACS LB/GAL ACS

Clearinghou		Dollutont	Required
41.007	e / Name or Description Flexible Vinyl & Urethane Coating and	<u>Pollutant</u> VOC	Emission Units LB/LB ink solids
11.007	Printing	100	LD/LD IIIK SOIIGS
41.008	Large Appliance Surface Coating	VOC	LB/GAL ACS
41.011	Metal Coil Surface Coating	VOC	LB/GAL ACS
41.012	Metal Furniture Surface Coating	VOC	LB/GAL ACS
41.015	Plastic Parts for Business Machines	VOC	LB/GAL ACS
	Surface Coating		
41.018	Pressure Sensitive Tape & Label Surface Coating	VOC	LB/LB ACS
50.003	Petroleum Refining - Cracking	PM, PM10 &	LB/1000 LB
	Ç Ç	PM2.5, SOx CO	PPMV
50.006	Petroleum Refining - Claus Sulfur	SOx, TRS,	PPMV @ 0% Excess Air
	Recovery Units	$H_2S$	
61.009	Phosphate Fertilizers Production	Total Fluoride	LB/T
62.001	Ammonium Sulfate Production	PM, PM10 &	LB/T ammonium sulfate
62.014	Nitric Acid Plants	PM2.5 NOX	pdtn. LB/T of Acid Produced
02.014	Nuite Acid Flants	NOA	(100% acid)
62.015	Sulfuric Acid Plants	SO <sub>2</sub> &	LB/T
		Acid Mist	
65.001 -	Synthetic Fibers Production	VOC	LB/1000 LB
65.999			solvent feed
70.007	Grain Elevators	PM, PM10 &	GR/DSCF
70.007	Grain Elevators	PM2.5	OIV/DSCI*
		1112.0	
81.003	Ferroalloy Production	PM, PM10 &	LB/MW-H
		PM2.5	
		CO	% (volume basis)
81.004	Iron Foundries	PM, PM10 &	GR/DSCF
		PM2.5	

Clearinghous		Required	
Process Code 81.005 - 81.007	Electric Arc Furnaces (EAF) & Argon-Oxygen Decarburlization (AOD) Furnaces at Stainless/Specialty Steel Plants Steel Foundries, & Steel Manufacturing plants	Pollutant PM, PM10 & PM2.5	Emission Units GR/DSCF
82.001	Lead Acid Battery Mfg. All Lead Emitting Operations	Pb (Lead)	GR/DSCF
82.005	Primary Aluminum Production	Total Fluorides	LB/T
82.006	Primary Copper Smelters	PM, PM10 & PM2.5	GR/DSCF
82.007	Primary Lead Smelting	PM, PM10 & PM2.5	GR/DSCF
82.009	Primary Zinc Smelting	PM, PM10 & PM2.5	GR/DSCF
82.011	Secondary Brass & Brass Ingot Production	PM, PM10 & PM2.5	GR/DSCF
82.013	Secondary Lead Smelting	PM, PM10 & PM2.5	GR/DSCF
90.004	Hot-Mix Asphalt Processing	PM, PM10 & PM2.5	GR/DSCF
90.011	Coal Handling/Processing/ Preparation/Cleaning	PM, PM10 & PM2.5	GR/DSCF
90.016	Glass Manufacturing Furnace	PM, PM10 & PM2.5	LB/T
90.019	Lime/Limestone Handling/Kilns/ Storage/Manufacturing.	PM, PM10 & PM2.5	LB/T
90.021	Metallic Mineral/Ore Processing	PM, PM10 & PM2.5	GR/DSCF
90.024	Non-metallic Mineral Processing	PM, PM10 & PM2.5	GR/DSCF
90.026	Phosphate Rock Processing	PM, PM10 & PM2.5	LB/T
90.028	Portland Cement Plants - kiln, in-line raw mill and kiln, clinker cooler	PM, PM10 & PM2.5	LB/T
90.033	Wool Fiberglass Manufacturing	PM, PM10 & PM2.5	LB/T glass pulled

Clearinghous	e		Required
<b>Process Code</b>	/ Name or Description	<b>Pollutant</b>	<b>Emission Units</b>
90.034	Asphalt Roofing Products	PM, PM10 &	LB/1000 LB
	Manufacturing	PM2.5	
99.015	Rubber Tire Manufacturing Industry -		
	Tread End Cementing, Water-Based	VOC	G/TIRE/MO
	Inside Green Tire Spray, & Water-		
	Based Outside Green Tire Spray		
	Bead Cementing	VOC	G/Bead/MO
	Organic Green Tire Spray, Michelin A	VOC	% Reduction
	Operations, Michelin B Operations		
	Michelin C Operations, Sidewall		
	Cementing, & Undertread Cementing		